

HIROI, et al., 09/986,577
 13 April 2006 Amendment
 Responsive to 13 December 2005 Office Action

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-27 (Cancelled)

Claim 28 (Currently Amended) A pattern inspection apparatus comprising:
 an image detecting part for detecting a digital image of an object substrate;
 a display having a screen on which the digital image of the object substrate
is and/or a distribution of defect candidates in a map form are displayable;

an input device for inputting information of a non-inspection region to be
 masked on the object substrate for display by defining a region on the screen on
 which said distribution of defect candidates is displayed in a map form;

a memory part for storing coordinate data, pattern data or feature quantity
 data of the non-inspection region to be masked on the object substrate on which a
 pattern is formed inputted on the screen by the input device; and

a defect judging part in which the digital image detected by the image
 detecting part is examined in a state that a region matching with a condition stored in
 the memory part is masked and detecting a defect is detected in a region other than
 said masked region. ;

wherein an actual digital image of the detected defect is displayed together
 with positional information of the detected defect in a map form on the screen of the
 display.

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Claim 29 (Currently Amended) A pattern inspection apparatus comprising:

image detecting means for obtaining a digital image of an object substrate on which a pattern is formed through microscopic observation thereof;

a display having a screen on which the digital image of the object substrate is displayable;

an input device for inputting information of a ~~pre-registered region or pre-registered pattern~~ to be masked on the object substrate; ~~for display on the screen;~~

defect detecting means for detecting defects of the pattern formed on said object substrate by comparing the digital image attained by the image detecting means with a reference image; ~~and while masking the pre-registered region or a pattern matching with the pre-registered pattern; and~~

output means for outputting data regarding the defects detected by the defect detecting means ~~including digital images of said defects detected by masking and the positional distribution data thereof in a map form~~ a region matching with the information inputted by the input device.;

~~wherein an actual digital image of the detected defect is displayed together with positional information of the detected defect in a map form on the screen of the display.~~

Claim 30 (Currently Amended) A pattern inspection apparatus as claimed in Claim 29,

wherein the ~~pre-registered region or pre-registered pattern~~ is set up using the digital image obtained by the image detecting means through microscopic observation of the object substrate by the input device.

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Claim 31-38 (Cancelled)

Claim 39 (New) A pattern inspection apparatus as claimed in Claim 28,
wherein said image detecting part includes an electron beam generator which
emits an electron beam and a detector which detects a secondary electron
emanated from said object substrate by the irradiation of said electron beam, to
detect the image of said object substrate.

Claim 40 (New) A pattern inspection apparatus as claimed in Claim 28,
wherein said image detecting part includes a light source which illuminates
said object substrate with light, and a detector which detects light from the object
substrate illuminated by said light source, to detect the image of said object
substrate.

Claim 41 (New) A pattern inspection apparatus as claimed in Claim 29,
wherein said image detecting part includes an electron beam generator which
emits an electron beam and a detector which detects a secondary electron
emanated from said object substrate by the irradiation of said electron beam to
detect the image of said object substrate.

Claim 42 (New) A pattern inspection apparatus as claimed in Claim 29,
wherein said image detecting part includes a light source which illuminates
said object substrate with light, and a detector which detects light from the object
substrate illuminated by said light source, to detect the image of said object
substrate.

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Claim 43 (New) A pattern inspection apparatus as claimed in claim 28,
wherein the inputting is effected by a human user manually designating the non-
inspection region on the display screen.

Claim 44 (New) A pattern inspection apparatus as claimed in claim 29,
wherein the inputting is effected by a human user manually designating the region to
be masked, on the display screen.